



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
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www.miamidade.gov/economy

NOTICE OF ACCEPTANCE (NOA)

US Ply, Inc.
2000 E. Richmond Ave.
Fort Worth, TX 76104

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code including the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: US Ply APP Modified Bitumen Roofing Systems Over Recover Decks

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA consists of pages 1 through 22.

The submitted documentation was reviewed by Alex Tigera.



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Expiration Date: 03/28/18
Approval Date: 03/28/13
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ROOFING ASSEMBLY NOTICE OF ACCEPTANCE

Category: Roofing
Sub-Category: Modified Bitumen
Material: APP
Deck Type: Recover
Maximum Design Pressure: -262.5 psf

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

| <u>Product</u> | <u>Dimensions</u> | <u>Test Specification</u> | <u>Product Description</u> |
|--------------------|-------------------|--------------------------------|--|
| USP Base Sheet | 36" x 108' | ASTM D 4601 | An asphaltic, fiberglass reinforced base sheet |
| USP NVB | 36" x 36' | ASTM D 4897 Type II | Fiberglass reinforced venting base sheet. |
| USP Type IV | 36" X 180' | ASTM D 2178 | An asphaltic, fiberglass reinforced, ASTM D2178 Type IV ply sheet. |
| USP Type VI | 36" X 180' | ASTM D 2178 | An asphaltic, fiberglass reinforced, ASTM D2178 Type VI ply sheet. |
| USP APP 160S | 39-3/8" X 32' 9" | ASTM D 6222 Type I, Grade S | Polyester reinforced, smooth surfaced, APP modified bitumen base / interply sheet. |
| USP APP 160S Plus | 39-3/8" X 32' 9" | ASTM D 6222 Type I, Grade S | Torch applied, smooth surfaced, polyester reinforced, APP modified bitumen membrane |
| USP APP 160M | 39-3/8" X 32' 9" | ASTM D 6222 Type I, Grade M | Polyester reinforced, mineral granule surfaced, APP modified bitumen cap sheet. |
| SafeWeld 180S APP | 39-3/8 x 32' 9" | ASTM D 6222 Type I, Grade S | Smooth surfaced, polyester reinforced APP modified bitumen membrane with talc underside. |
| SafeWeld 180M APP | 39-3/8 X 32' 9" | ASTM D 6222 Type I, Grade G | Smooth surfaced, polyester reinforced APP modified bitumen membrane with slag underside. |
| SafeWeld 180FR APP | 39-3/8" x 32' 9" | ASTM D 6222 Type I, Grade G | Granule surfaced, polyester reinforced, fire resistant, APP modified bitumen membrane with slag underside. |
| DuraWeld 4S APP | 39-3/8" x 32' 9" | ASTM D 6222 Type I, Grade S | Smooth surfaced, polyester reinforced, APP modified bitumen base / interplay sheet. |
| DuraWeld 5S APP | 39-3/8" x 32' 9" | ASTM D 6222 Type I, Grade S | Smooth surfaced, polyester reinforced, APP modified bitumen base / interplay sheet. |
| DuraWeld 4M APP | 39-3/8" x 32' 9" | ASTM D 6222 Type I, Grade G | Polyester reinforced, granule surfaced APP modified bitumen cap sheet. |
| DuraWeld 4M FR APP | 39-3/8" X 32' 9" | ASTM D 6222 Type I, Grade G | Polyester reinforced, mineral granule surfaced, fire resistant, APP modified bitumen cap sheet. |

USP #442 Fibered
Aluminum Roof Coating

5 gal

ASTM D 2824
Type III

A hydrocarbon protective coating.

APPROVED INSULATIONS:

TABLE 2

| <u>Product Name</u> | <u>Product Description</u> | <u>Manufacturer</u> <u>(With Current NOA)</u> |
|--|---|--|
| ENRGY 3, PSI-25, JM ISO 3 | Isocyanurate Insulation. | Johns Manville Corporation |
| FescoBoard | Rigid perlite roof insulation board. | Johns Manville Corporation |
| Multi-Max-3, Multi-Max FA-3 | Polyisocyanurate Insulation | Rmax Operating, Inc. |
| H-Shield, Tapered H-Shield, H-Shield CG | Polyisocuanurate foam insulation | Hunter Panels, LLC |
| ACFoam-II, ACFoam-III | Polyisocyanurate Insulation | Atlas Roofing Corporation |
| ACFoam-IV | Polyisocyanurate insulation with a coated glass mat. | Atlas Roofing Corporation |
| ISO 95+ GL | Polyisocyanurate foam insulation | Firestone Building Products Company, LLC |
| DensDeck, DensDeck Prime, DensDeck DuraGuard Overlayment Board | Water resistant gypsum board | Georgia-Pacific Gypsum LLC |
| SECUROCK Gypsum-Fiber Roof Board | Gypsum board | United States Gypsum LLC |
| Structodek High Density Fiberboard Roof Insulation | High Density Wood Fiber insulation board. | Blue Ridge Fiberboard, Inc. |
| Approved XPS | Closed-cell, extruded polystyrene insulation | Generic |
| Insulfoam EPS | Closed-cell, expanded polystyrene board | Insulfoam LLC |



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APPROVED FASTENERS:**TABLE 3**

| <u>Fastener Number</u> | <u>Product Name</u> | <u>Product Description</u> | <u>Dimensions</u> | <u>Manufacturer (With Current NOA)</u> |
|-------------------------------|-----------------------------------|--|--------------------------|---|
| 1. | Twin Loc-Nail | Preassembled glavalume steel fastener/plate unit. | Various | ES Products, Inc. |
| 2. | PlyFast Double Lock Nail E | Preassembled glavalume steel fastener/plate unit. | Various | U.S. Ply, Inc. |
| 3. | FM-75, FM-90 | Base ply fasteners. | Various | ES Products, Inc. |
| 4. | PlyFast 1.7" Base Ply Fastener E | Galvanized steel fastener | Various | U.S. Ply, Inc. |
| 5. | OMG Heavy Duty | Self drilling fastener for steel used wood, steel or concrete decks | Various | OMG, Inc. |
| 6. | 3 in. Round Metal Plate | Insulation fastening plate | 3" Round | OMG, Inc. |
| 7. | Trufast 3" Metal Insulation Plate | Galvalume steel stress plate | 3" Diameter | Altenloh, Brinck & Co. US., Inc. |
| 8. | Trufast #14 HD Fasteners | Self-drilling, coated, carbon steel fastener used in concrete, steel and wood decks. | Various | Altenloh, Brinck & Co. US., Inc. |
| 9. | PlyFast #14 Fastener T | Fastener used in steel, concrete and wood decks. | Various | U.S. Ply, Inc. |
| 10. | PlyFast 3" Metal Plate T | Galvalume steel stress plate | 3" Diameter | U.S. Ply, Inc. |
| 11. | PlyFast #14 Fastener O | Self drilling fastener for steel used wood, steel or concrete decks | Various | U.S. Ply, Inc. |
| 12. | PlyFast 3" Metal Plate O | Insulation fastening plate | 3" Round | U.S. Ply, Inc. |

EVIDENCE SUBMITTED:

| <u>Test Agency</u> | <u>Test Identifier</u> | <u>Description</u> | <u>Date</u> |
|---------------------------------|-------------------------------|---------------------------|--------------------|
| Factory Mutual Research Corp. | 3020703 | FM 4470 | 07/30/04 |
| | 3014751 | FM 4450 | 08/27/03 |
| | 3012321 | FM 4470 | 07/29/02 |
| | 3014692 | FM 4470 | 08/05/03 |
| | 3024311 | FM 4470 | 11/01/06 |
| | 3026836 | FM 4454 | 07/13/07 |
| | 3023458 | FM 4450 | 07/18/06 |
| | 3029993 | FM 4470 | 09/21/07 |
| Exterior Research & Design, LLC | 2005.U0212.09.05-R3 | FM 4470 | 03/21/13 |
| | U11650.07.09-1 | TAS 114 | 07/15/09 |
| | U0215.05.06-2-R2 | ASTM D6222 | 08/02/10 |
| | 02762.03.05-R2 | FM 4470 | 04/01/10 |
| | U41790.05.12-1 | ASTM D6222 & TAS 110 | 05/30/12 |
| | U41790.05.12-2 | ASTM D6222 & TAS 110 | 05/30/12 |
| | U35910.12.11-1 | TAS 117 | 12/21/11 |
| | U35910.12.11-3 | ASTM D1878 | 12/21/11 |

APPROVED ASSEMBLIES

Membrane Type: APP

Deck Type 7I: Recover

Deck Description: 2500 psi structural concrete or concrete plank

System Type A(1): One or more layers of insulation adhered with approved adhesive.

All General and System limitations apply.

One or more layers of any of the following insulations:

| <u>Insulation Layer</u> | <u>Insulation Fasteners (Table 3)</u> | <u>Fastener Density/ft²</u> |
|--------------------------------|---|--|
| FescoBoard Minimum ¾" thick | N/A | N/A |

Note: All insulation shall be adhered to the deck in with OMG OlyBond 500 Adhesive Fastener applied in ¾" to 1" ribbons spaced 12 in. o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: One ply of USP Base Sheet is fully adhered with hot asphalt.

Ply Sheet: (Optional) One ply of USP APP 160S, USP APP 160S Plus, SafeWeld 180S APP, DuraWeld 5S APP or DuraWeld 4S APP, heat welded.

Membrane: One ply of USP APP 160M, SafeWeld 180M APP, SafeWeld 180FR APP, DuraWeld 4M APP or DuraWeld 4M FR APP, heat welded.

Surfacing: For use on non FR membranes:
USP #442 Fibered Aluminum Roof Coating applied at a rate of 1.5 gal/sq.

Maximum Design Pressure: -120.0 psf (See General Limitation #9.)



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Membrane Type: APP
Deck Type 7I: Recover
Deck Description: 2500 psi structural concrete or concrete plank
System Type A(2): One or more layers of insulation adhered with approved adhesive.

All General and System limitations apply.

One or more layers of any of the following insulations:

| <u>Base Insulation Layer (Optional)</u> | <u>Insulation Fasteners (Table 3)</u> | <u>Fastener Density/ft²</u> |
|--|--|---|
| H-Shield, AC Foam-II, ISO 95+ GL or ENRGY 3 Minimum 2" thick | N/A | N/A |
| <u>Top Insulation Layer</u> | <u>Insulation Fasteners (Table 3)</u> | <u>Fastener Density/ft²</u> |
| DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board Minimum 1/4" thick | N/A | N/A |

Note: All insulation shall be adhered to the deck in with OMG OlyBond 500 Adhesive Fastener applied in 3/4" to 1" ribbons spaced 12 in. o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: One ply of USP APP 160S, USP APP 160S Plus, SafeWeld 180S APP, DuraWeld 5S APP or DuraWeld 4S APP, heat welded.

Ply Sheet: (Optional) One ply of USP APP 160S, USP APP 160S Plus, SafeWeld 180S APP, DuraWeld 5S APP or DuraWeld 4S, APP heat welded.

Membrane: One ply of USP APP 160M, SafeWeld 180M APP, SafeWeld 180FR APP, DuraWeld 4M APP or DuraWeld 4M FR APP, heat welded.

Surfacing: For use on non FR membranes:
USP #442 Fibered Aluminum Roof Coating applied at a rate of 1.5 gal/sq.

Maximum Design Pressure: -120 psf (See General Limitation #9.)



Membrane Type: APP
Deck Type 7I: Recover
Deck Description: 2500 psi structural concrete or concrete plank
System Type A(3): One or more layers of insulation adhered with approved adhesive.

All General and System limitations apply.

One or more layers of any of the following insulations:

| <u>(Optional) Base Insulation Layer</u> | <u>Insulation Fasteners (Table 3)</u> | <u>Fastener Density/ft²</u> |
|--|---|--|
| Insulfoam EPS Minimum 2.0" thick | N/A | N/A |
| <u>Top Insulation Layer</u> | <u>Insulation Fasteners (Table 3)</u> | <u>Fastener Density/ft²</u> |
| DensDeck, DensDeck Prime Minimum 1/4" thick | N/A | N/A |

Note: All insulation shall be adhered to the deck in with OMG OlyBond 500 Adhesive Fastener applied in 3/4" to 1" ribbons spaced 12 in. o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: One ply of USP APP 160S, USP APP 160S Plus, SafeWeld 180S APP, DuraWeld 5S APP or DuraWeld 4S APP, heat welded.

Ply Sheet: (Optional) One or more layers of USP APP 160S, USP APP 160S Plus, SafeWeld 180S APP, DuraWeld 5S APP or DuraWeld 4S APP, heat welded.

Membrane: One ply of USP APP 160M, SafeWeld 180M APP, SafeWeld 180FR APP, DuraWeld 4M APP or DuraWeld 4M FR APP, heat welded.

Surfacing: For use on non FR membranes:
USP #442 Fibered Aluminum Roof Coating applied at a rate of 1.5 gal/sq.

Maximum Design Pressure: -120.0 psf (See General Limitation #9.)



Membrane Type: APP
Deck Type 7I: Recover
Deck Description: 2500 psi structural concrete or concrete plank
System Type A(4): One or more layers of insulation adhered with approved adhesive.

All General and System limitations apply.

One or more layers of any of the following insulations:

| <u>(Optional) Base Insulation Layer</u> | <u>Insulation Fasteners (Table 3)</u> | <u>Fastener Density/ft²</u> |
|--|--|---|
| Insulfoam EPS Minimum 2.0" thick | N/A | N/A |
| <u>Top Insulation Layer</u> | <u>Insulation Fasteners (Table 3)</u> | <u>Fastener Density/ft²</u> |
| Structodek High Density Fiberboard Roof Insulation Minimum ½" thick | N/A | N/A |

Note: All insulation shall be adhered to the deck in with OMG OlyBond 500 Adhesive Fastener applied in ¾" to 1" ribbons spaced 12 in. o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: One ply of USP Base Sheet fully adhered in hot asphalt.

Ply Sheet: (Optional) One or more layers of USP APP 160S, USP APP 160S Plus, SafeWeld 180S APP, DuraWeld 5S APP or DuraWeld 4S APP, heat welded.

Membrane: One ply of USP APP 160M, SafeWeld 180M APP, SafeWeld 180FR APP, DuraWeld 4M APP or DuraWeld 4M FR APP, heat welded.

Surfacing: For use on non FR membranes:
USP #442 Fibered Aluminum Roof Coating applied at a rate of 1.5 gal/sq.

Maximum Design Pressure: -120.0 psf (See General Limitation #9.)



Membrane Type: APP
Deck Type 7I: Recover
Deck Description: 2500 psi structural concrete or concrete plank
System Type A(5): One or more layers of insulation adhered with approved adhesive.

All General and System limitations apply.

One or more layers of any of the following insulations:

| <u>(Optional) Base Insulation Layer</u> | <u>Insulation Fasteners (Table 3)</u> | <u>Fastener Density/ft²</u> |
|--|--|---|
| Any Approved XPS Minimum 1.0" thick | N/A | N/A |
| <u>Top Insulation Layer</u> | <u>Insulation Fasteners (Table 3)</u> | <u>Fastener Density/ft²</u> |
| DensDeck, DensDeck Prime Minimum 1/4" thick | N/A | N/A |

Note: All insulation shall be adhered to the deck in with **OMG OlyBond 500 Adhesive Fastener** applied in 3/4" to 1" ribbons spaced 12 in. o.c. Please refer to **Roofing Application Standard RAS 117** for insulation attachment.

Base Sheet: One ply of USP APP 160S, USP APP 160S Plus, SafeWeld 180S APP, DuraWeld 5S APP or DuraWeld 4S APP, heat welded.

Ply Sheet: (Optional) One ply of USP APP 160S, USP APP 160S Plus, SafeWeld 180S APP, DuraWeld 5S APP or DuraWeld 4S APP, heat welded.

Membrane: One ply of USP APP 160M, SafeWeld 180M APP, SafeWeld 180FR APP, DuraWeld 4M APP or DuraWeld 4M FR APP, heat welded.

Surfacing: For use on non FR membranes:
USP #442 Fibered Aluminum Roof Coating applied at a rate of 1.5 gal/sq.

Maximum Design Pressure: -120.0 psf (See General Limitation #9.)



Membrane Type: APP
Deck Type 7I: Recover
Deck Description: 2500 psi structural concrete or concrete plank
System Type A(6): One or more layers of insulation adhered with approved adhesive.

All General and System limitations apply.

One or more layers of any of the following insulations:

| <u>(Optional) Base Insulation Layer</u> | <u>Insulation Fasteners (Table 3)</u> | <u>Fastener Density/ft²</u> |
|--|--|---|
| ISO 95+ GL Minimum 1.5" thick | N/A | N/A |
| <u>Top Insulation Layer</u> | <u>Insulation Fasteners (Table 3)</u> | <u>Fastener Density/ft²</u> |
| Structodek High Density Fiberboard Roof Insulation Minimum ½" thick | N/A | N/A |

Note: All insulation shall be adhered to the deck in with OMG OlyBond 500 Adhesive Fastener applied in ¾" to 1" ribbons spaced 12 in. o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: One ply of USP Base Sheet is fully adhered with hot asphalt.

Ply Sheet: (Optional) One ply of USP APP 160S, USP APP 160S Plus, SafeWeld 180S APP, DuraWeld 5S APP or DuraWeld 4S APP, heat welded.

Membrane: One ply of USP APP 160M, SafeWeld 180M APP, SafeWeld 180FR APP, DuraWeld 4M APP or DuraWeld 4M FR APP, heat welded.

Surfacing: For use on non FR membranes:
USP #442 Fibered Aluminum Roof Coating applied at a rate of 1.5 gal/sq.

Maximum Design Pressure: -120.0 psf (See General Limitation #9.)



Membrane Type: APP
Deck Type 7I: Recover
Deck Description: Elastizell Lightweight Concrete
System Type A(7): One or more layers of insulation adhered with approved adhesive.

All General and System limitations apply.

One or more layers of any of the following insulations:

| <u>Base Insulation Layer</u> | <u>Insulation Fasteners (Table 3)</u> | <u>Fastener Density/ft²</u> |
|--|--|---|
| H-Shield, AC Foam-II, ISO 95+ GL Minimum 1.5" thick | N/A | N/A |
| Structodek High Density Fiberboard Roof Insulation Minimum ½" thick | N/A | N/A |
| DensDeck, DensDeck Prime Minimum ¼" thick | N/A | N/A |

Note: All insulation shall be adhered to the deck in with OMG OlyBond 500 Adhesive Fastener applied in ¾" to 1" ribbons spaced 12 in. o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: One ply of USP APP 160S, USP APP 160S Plus, SafeWeld 180S APP, DuraWeld 5S APP or DuraWeld 4S APP, heat welded to DensDeck, DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board coverboards only.

Ply Sheet: (Optional) One or more layers of USP APP 160S, USP APP 160S Plus, SafeWeld 180S APP, DuraWeld 5S APP or DuraWeld 4S APP, heat welded.

Membrane: One ply of USP APP 160M, SafeWeld 180M APP, SafeWeld 180FR APP, DuraWeld 4M APP or DuraWeld 4M FR APP, heat welded.

Surfacing: For use on non FR membranes:
USP #442 Fibered Aluminum Roof Coating applied at a rate of 1.5 gal/sq.

Maximum Design Pressure: -120.0 psf (See General Limitation #9.)



Membrane Type: APP
Deck Type 7I: Recover
Deck Description: 2500 psi structural concrete or concrete plank
System Type A(8): One or more layers of insulation adhered with approved adhesive.

All General and System limitations apply.

One or more layers of any of the following insulations:

| <u>Base Insulation Layer</u> | <u>Insulation Fasteners (Table 3)</u> | <u>Fastener Density/ft²</u> |
|---|--|---|
| ACFoam-II, H-Shield, ENRGY 3, Multi-Max-3, ISO 95+ GL Minimum 1.5" thick | N/A | N/A |
| <u>Top Insulation Layer</u> | <u>Insulation Fasteners (Table 3)</u> | <u>Fastener Density/ft²</u> |
| Structodek High Density Fiberboard Roof Insulation Minimum ½" thick | N/A | N/A |

Note: All insulation shall be adhered to the deck in with Millennium One Step Foamable Adhesive or Millennium PG-1 Pump Grade Adhesive applied in ½" to ¾" ribbons spaced 12 in. o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: One ply of USP Base Sheet is fully adhered with hot asphalt.

Ply Sheet: (Optional) One ply of USP APP 160S, USP APP 160S Plus, SafeWeld 180S APP, DuraWeld 5S APP or DuraWeld 4S APP, heat welded.

Membrane: One ply of USP APP 160M, SafeWeld 180M APP, SafeWeld 180FR APP, DuraWeld 4M APP or DuraWeld 4M FR APP, heat welded.

Surfacing: For use on non FR membranes:
USP #442 Fibered Aluminum Roof Coating applied at a rate of 1.5 gal/sq.

Maximum Design Pressure: -127.5 psf (See General Limitation #9.)



Membrane Type: APP
Deck Type 7I: Recover
Deck Description: 2500 psi structural concrete or concrete plank
System Type A(9): One or more layers of insulation adhered with approved adhesive.

All General and System limitations apply.

One or more layers of any of the following insulations:

| <u>Base Insulation Layer</u> | <u>Insulation Fasteners (Table 3)</u> | <u>Fastener Density/ft²</u> |
|--|--|---|
| ACFoam-II, H-Shield, ENRGY 3, Multi-Max-3 Minimum 2" thick | N/A | N/A |
| <u>Top Insulation Layer</u> | <u>Insulation Fasteners (Table 3)</u> | <u>Fastener Density/ft²</u> |
| DensDeck, SECUROCK Gypsum-Fiber Roof Board Minimum 1/4" thick | N/A | N/A |

Note: All insulation shall be adhered to the deck in with Millennium One Step Foamable Adhesive applied in 1/2" to 3/4" ribbons spaced 12 in. o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: One ply of USP APP 160S, USP APP 160S Plus, SafeWeld 180S APP, DuraWeld 5S APP or DuraWeld 4S APP, heat welded.

Ply Sheet: (Optional) One ply of USP APP 160S, USP APP 160S Plus, SafeWeld 180S APP, DuraWeld 5S APP or DuraWeld 4S APP, heat welded.

Membrane: One ply of USP APP 160M, SafeWeld 180M APP, SafeWeld 180FR APP, DuraWeld 4M APP or DuraWeld 4M FR APP, heat welded.

Surfacing: For use on non FR membranes:
USP #442 Fibered Aluminum Roof Coating applied at a rate of 1.5 gal/sq.

Maximum Design Pressure: -157.0 psf (See General Limitation #9.)



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Membrane Type: APP
Deck Type 7I: Recover
Deck Description: 2500 psi structural concrete or concrete plank
System Type A(10): One or more layers of insulation adhered with approved adhesive.

All General and System limitations apply.

One or more layers of any of the following insulations:

| <u>Base Insulation Layer</u> | <u>Insulation Fasteners (Table 3)</u> | <u>Fastener Density/ft²</u> |
|--|--|---|
| ACFoam-II, H-Shield, ENRGY 3, Multi-Max-3 Minimum 1.5" thick | N/A | N/A |
| <u>Top Insulation Layer</u> | <u>Insulation Fasteners (Table 3)</u> | <u>Fastener Density/ft²</u> |
| Structodek High Density Fiberboard Roof Insulation Minimum ½" thick | N/A | N/A |

Note: All insulation shall be adhered to the deck in with Millennium PG-1 Pump Grade Adhesive applied in ½" to ¾" ribbons spaced 12 in. o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: One ply of USP Base Sheet fully adhered in hot asphalt.

Ply Sheet: (Optional) One or more layers of USP APP 160S, USP APP 160S Plus, SafeWeld 180S APP, DuraWeld 5S APP or DuraWeld 4S APP, heat welded.

Membrane: One ply of USP APP 160M, SafeWeld 180M APP, SafeWeld 180FR APP, 4M APP or DuraWeld 4M FR APP, heat welded.

Surfacing: For use on non FR membranes:
USP #442 Fibered Aluminum Roof Coating applied at a rate of 1.5 gal/sq.

Maximum Design Pressure: -180.0 psf (See General Limitation #9.)



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Membrane Type: APP
Deck Type 7I: Recover
Deck Description: 2500 psi structural concrete or concrete plank
System Type A(11): Insulation adhered with approved adhesive..

All General and System limitations apply.

One or more layers of any of the following insulations:

| <u>Base Insulation Layer (Optional)</u> | <u>Insulation Fasteners (Table 3)</u> | <u>Fastener Density/ft²</u> |
|---|--|---|
| ACFoam-II, H-Shield, ENRGY 3, Multi-Max-3, ISO 95+ GL Minimum 1.5" thick | N/A | N/A |
| <u>Top Insulation Layer</u> | <u>Insulation Fasteners (Table 3)</u> | <u>Fastener Density/ft²</u> |
| Structodek High Density Fiberboard Roof Insulation or Approved High Density Fiberboard Insulation Minimum ½" thick | N/A | N/A |

Note: All insulation shall be adhered to the deck in with Millennium PG-1 Pump Grade Adhesive applied in ½" to ¾" ribbons spaced 12 in. o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: One ply of USP Base Sheet is fully adhered with hot asphalt.

Ply Sheet: (Optional) One ply of USP APP 160S, USP APP 160S Plus, SafeWeld 180S APP, DuraWeld 5S APP or DuraWeld 4S APP, heat welded.

Membrane: One ply of USP APP 160M, SafeWeld 180M APP, SafeWeld 180FR APP, DuraWeld 4M APP or DuraWeld 4MFR APP, heat welded.

Surfacing: For use on non FR membranes:
USP #442 Fibered Aluminum Roof Coating applied at a rate of 1.5 gal/sq.

Maximum Design Pressure: -180.0 psf (See General Limitation #9.)



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Membrane Type: APP
Deck Type 7I: Recover
Deck Description: 2500 psi structural concrete or concrete plank
System Type A(12): Insulation adhered with approved adhesive..

All General and System limitations apply.

One or more layers of any of the following insulations:

| <u>Base Insulation Layer</u> | <u>Insulation Fasteners (Table 3)</u> | <u>Fastener Density/ft²</u> |
|---|--|---|
| ACFoam-II, H-Shield, ENRGY 3, Multi-Max-3 Minimum 1.5" thick | N/A | N/A |
| <u>Top Insulation Layer</u> | <u>Insulation Fasteners (Table 3)</u> | <u>Fastener Density/ft²</u> |
| DensDeck Minimum 1/4" thick | N/A | N/A |

Note: All insulation shall be adhered to the deck in with Millennium PG-1 Pump Grade Adhesive applied in 1/2" to 3/4" ribbons spaced 12 in. o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: One ply of USP Base Sheet is fully adhered with hot asphalt.

Ply Sheet: (Optional) One ply of USP APP 160S, USP APP 160S Plus, SafeWeld 180S APP, DuraWeld 5S APP or DuraWeld 4S APP, heat welded.

Membrane: One ply of USP APP 160M, SafeWeld 180M APP, SafeWeld 180FR APP, DuraWeld 4M APP or DuraWeld 4MFR APP, heat welded.

Surfacing: For use on non FR membranes:
USP #442 Fibered Aluminum Roof Coating applied at a rate of 1.5 gal/sq.

Maximum Design Pressure: -180.0 psf (See General Limitation #9.)



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Membrane Type: APP
Deck Type 7I: Recover
Deck Description: Steel / Concrete
System Type A(13): One or more layers of insulation adhered with approved adhesive.

All General and System limitations apply.

One or more layers of any of the following insulations:

| <u>Base Insulation Layer</u> | <u>Insulation Fasteners</u> <u>(Table 3)</u> | <u>Fastener</u> <u>Density/ft²</u> |
|--|---|--|
| ACFoam-II, ACFoam-III, ISO 95+ GL, JM ISO 3, Multi-Max FA-3 Minimum 1.5" thick | N/A | N/A |
| DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board, DensDeck DuraGuard Overlayment Board Minimum ½" thick | N/A | N/A |

Note: Insulation shall be adhered to the with 3M CR-20 Roofing Adhesive or TITESET Roofing Adhesive spray applied in 3" to 3½" ribbons spaced 12 in. o.c. Please refer to Roofing Application Standard RAS 117 for insulation attachment.

Base Sheet: One ply of USP APP 160S, USP APP 160S Plus, SafeWeld 180S APP, DuraWeld 5S APP or DuraWeld 4S APP, heat welded.

Ply Sheet: (Optional) One ply of USP APP 160S, USP APP 160S Plus, SafeWeld 180S APP, DuraWeld 5S APP or DuraWeld 4S APP, heat welded.

Membrane: One ply of USP APP 160M, SafeWeld 180M APP, SafeWeld 180FR APP, DuraWeld 4M APP or DuraWeld 4M FR APP, heat welded.

Surfacing: For use on non FR membranes:
USP #442 Fibered Aluminum Roof Coating applied at a rate of 1.5 gal/sq.

Maximum Design Pressure: -262.5 psf (See General Limitation #9.)



Membrane Type: APP

Deck Type 7I: Recover

Deck Description: 22 ga. Type B, Grade 33 steel, fastened 6" o.c. with Buildex Tek 5 fasteners to steel supports spaced max. 6 ft o.c.

System Type B(1): Base layer of insulation mechanically fastened, optional top layer adhered with approved asphalt.

All General and System limitations apply.

One or more layers of any of the following insulations:

| <u>Base Insulation Layer</u> | <u>Insulation Fasteners (Table 3)</u> | <u>Fastener Density/ft²</u> |
|--|--|---|
| ISO 95+ GL, ENRGY 3 Minimum 2.0" thick | 6 with 7 12 with 13 | 1 : 1.6 ft² |
| ACFoam-II, Mult-Max FA-3 Minimum 2.0" thick | 8 with 9 11 with 10 6 with 7 12 with 13 | 1 : 1.6 ft² |

Note: Base layer shall be mechanically attached with fasteners and density described. Insulation panels listed are minimum sizes and dimensions; if larger panels are used the number of fasteners per board shall be increased maintaining the same fastener density (See Roofing Application Standard RAS 117 for fastening details).

| <u>Top Insulation Layer</u> | <u>Insulation Fasteners (Table 3)</u> | <u>Fastener Density/ft²</u> |
|--|--|---|
| FescoBoard Minimum ¾" thick | N/A | N/A |
| Structodek High Density Fiberboard Roof Insulation Minimum ½" thick | N/A | N/A |
| DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board or DensDeck DuraGuard Overlayment Board Minimum ¼" thick | N/A | N/A |

Note: Top layer of insulation shall be adhered with approved asphalt within the EVT range and at a rate of 25 lbs/sq² Please refer to Roofing Application Standard RAS 117 for insulation attachment. Composite insulation boards used as a top layer shall be installed with the polyisocyanurate face down.

Base Sheet: One ply of USP Base Sheet is fully adhered with hot asphalt to coverboard.

Ply Sheet: (Optional) One or more layers of USP APP 160S, USP APP 160S Plus, SafeWeld 180SAPP, DuraWeld 5S APP or DuraWeld 4S APP, heat welded.



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Membrane: One ply of SafeWeld 180M APP, SafeWeld 180FR APP, USP APP 160M, DuraWeld 4M APP or DuraWeld 4M FR APP, heat welded.

Surfacing: For use on non FR membranes:
USP #442 Fibered Aluminum Roof Coating applied at a rate of 1.5 gal/sq.

Maximum Design Pressure: - 67.5 psf (See General Limitation #7).



Membrane Type: APP

Deck Type 7I: Recover

Deck Description: 22 ga. Type B, Grade 33 steel, fastened 6" o.c. with Buildex Tek 5 fasteners to steel supports spaced max. 6 ft o.c.

System Type D(1): One or more layers of insulation and base sheet simultaneously attached.

All General and System limitations apply.

One or more layers of any of the following insulations:

| <u>Base Insulation Layer</u> | <u>Insulation Fasteners (Table 3)</u> | <u>Fastener Density/ft²</u> |
|--|--|---|
| Any approved polyisocyanurate Listed in Table 2 Minimum 2.0" thick | N/A | N/A |
| <u>(Optional) Top Insulation Layer</u> | <u>Insulation Fasteners (Table 3)</u> | <u>Fastener Density/ft²</u> |
| DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board, DensDeck DuraGuard Overlayment Board Minimum 1/4" thick | N/A | N/A |

Note: Top layer shall have preliminary attachment, prior to the installation of the base/anchor sheet, at a minimum application rate of two fasteners per board for insulation boards having no dimension greater than 4 ft., and four fasteners for any insulation board having no dimension greater than 8 ft. All layers of insulation and base sheet shall be simultaneously fastened. See base/anchor sheet below for fasteners and density.

Base Sheet: One ply of USP Base Sheet mechanically fastened to the deck with PlyFast #14 Fastener O or OMG Heavy Duty fasteners with OMG 3 in. Round Metal Plates, or Trufast #14 HD Fasteners with Trufast 3" Metal Insulation Plates, or PlyFast #14 Fastener T with PlyFast 3" Metal Plate T spaced 6" o.c. in a 4" side lap and 6" o.c. in two, equally spaced, staggered rows.

Ply Sheet: (Optional) One or more layers of USP APP 160S, USP APP 160S Plus, SafeWeld 180S APP, DuraWeld 5S APP or DuraWeld 4S APP, heat welded.

Membrane: One ply of USP APP 160M, SafeWeld 180M APP, SafeWeld 180FR APP, DuraWeld 4M APP or DuraWeld 4M FR APP, heat welded.

Surfacing: For use on non FR membranes:
USP #442 Fibered Aluminum Roof Coating applied at a rate of 1.5 gal/sq.

Maximum Design Pressure: -135.0 psf (See General Limitation #7)



Membrane Type: APP
Deck Type 7I: Recover
Deck Description: Min. 300 psi Elastizell Lightweight Concrete
System Type E(1): Base sheet mechanically fastened to roof deck.

All General and System limitations apply.

Base Sheet: One ply of USP Base Sheet mechanically attached with Twin Loc-Nails, PlyFast Double Lock Nail E to engage the existing LWC (min. 1.8-inch embedment)
Or
PlyFast #14 Fastener O or OMG Heavy Duty Fasteners with OMG 3 in. Round Metal Plates, Trufast #14 HD Fasteners with Trufast 3” Metal Insulation Plates or PlyFast #14 Fastener T with PlyFast 3” Metal Plate T installed through the existing LWC to engage the structural deck.
Fasteners are to be spaced 9” o.c. in 4” lap and 9” o.c. in two, equally spaced, staggered rows.

Ply Sheet: (Optional) One or more layers of USP APP 160S, USP APP 160S Plus, SafeWeld 180S or DuraWeld 4S APP, heat welded.

Membrane: One ply of USP APP 160M, SafeWeld 180M APP, SafeWeld 180FR APP, DuraWeld 4M APP or DuraWeld 4M FR APP, heat welded.

Surfacing: For use on non FR membranes:
USP #442 Fibered Aluminum Roof Coating applied at a rate of 1.5 gal/sq.

Maximum Design Pressure: -60.0 psf (See General Limitation #7)



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RECOVER SYSTEM LIMITATIONS:

1. All System Limitations and General Limitations shall apply. See specific deck type Notice of Acceptance for deck type System Limitations.

GENERAL LIMITATIONS:

1. Fire classification is not part of this acceptance, refer to a current Approved Roofing Materials Directory for fire ratings of this product.
2. Insulation may be installed in multiple layers. The first layer shall be attached in compliance with Product Control Approval guidelines. All other layers shall be adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq., or mechanically attached using the fastening pattern of the top layer
3. All standard panel sizes are acceptable for mechanical attachment. When applied in approved asphalt, panel size shall be 4' x 4' maximum.
4. An overlay and/or recovery board insulation panel is required on all applications over closed cell foam insulations when the base sheet is fully mopped. If no recovery board is used the base sheet shall be applied using spot mopping with approved asphalt, 12" diameter circles, 24" o.c.; or strip mopped 8" ribbons in three rows, one at each sidelap and one down the center of the sheet allowing a continuous area of ventilation. Encircling of the strips is not acceptable. A 6" break shall be placed every 12' in each ribbon to allow cross ventilation. Asphalt application of either system shall be at a minimum rate of 12 lbs./sq. **Note: Spot attached systems shall be limited to a maximum design pressure of -45 psf.**
5. Fastener spacing for insulation attachment is based on a Minimum Characteristic Force (F') value of 275 lbf., as tested in compliance with Testing Application Standard TAS 105. If the fastener value, as field-tested, are below 275 lbf. insulation attachment shall not be acceptable.
6. Fastener spacing for mechanical attachment of anchor/base sheet or membrane attachment is based on a minimum fastener resistance value in conjunction with the maximum design value listed within a specific system. Should the fastener resistance be less than that required, as determined by the Building Official, a revised fastener spacing, prepared, signed and sealed by a Florida Registered Engineer, Architect, or Registered Roof Consultant may be submitted. Said revised fastener spacing shall utilize the withdrawal resistance value taken from Testing Application Standards TAS 105 and calculations in compliance with Roofing Application Standard RAS 117.
7. Perimeter and corner areas shall comply with the enhanced uplift pressure requirements of these areas. Fastener densities shall be increased for both insulation and base sheet as calculated in compliance with Roofing Application Standard RAS 117. Calculations prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant **(When this limitation is specifically referred within this NOA, General Limitation #9 will not be applicable.)**
8. All attachment and sizing of perimeter nailers, metal profile, and/or flashing termination designs shall conform with Roofing Application Standard RAS 111 and applicable wind load requirements.
9. The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners). **(When this limitation is specifically referred within this NOA, General Limitation #7 will not be applicable.)**

END OF THIS ACCEPTANCE